

faintly marked, and the interstices are flat and covered with extremely minute punctures and a delicate pubescence—this, however, is very indistinct. The under parts of the insect are black; the legs, palpi, and three basal joints of the antennæ are red; the remaining joints of the antennæ are brownish.

I have named this species after my friend the Secretary of the Entomological Society.

Genus *GEوبيUS*.

Sp. 1. *Geobius pubescens*, Dejean, Syst. Général des Coléoptères, tom. v. p. 606. Supplément.

Three specimens of this insect were brought by Mr. Darwin from Maldonado, La Plata.

Dejean states that in all the specimens examined by him, the anterior tarsi are simple: as the three specimens above-mentioned also have the anterior tarsi simple, it would appear that the sexes do not differ in this respect.

[To be continued.]

XLIII.—*Notices of British Fungi*. By the Rev. M. J. BERKELEY, M.A., F.L.S.

[With Five Plates.]

[Continued from Annals, vol. i. p. 264.]

138. *Agaricus Mappa*, Willd., Fr. Epicr. p. 6. Hitherto confounded with *A. Phalloides*, from which it is distinguished by its less developed volva, which instead of being cup-shaped, is little more than a mere rim fringing the bulb. The figures of Sowerby and Curtis quoted in Eng. Fl. under *A. Phalloides*, belong to this species.

*139. *A. Mariæ*, Kl. in Linn. Since the discovery of this species by Klotzsch at Glasgow, it has been found by Mr. Henderson at Milton, Norths., and Mr. C. Babington at Bredon, Leic. I have no doubt that it is the plant figured under the name of *A. asper* in *Abbildungen der Schwamme*, t. 21. (consequently *Amanita aspera*, Pers. Syn.), and by Krombholz, t. 29. fig. 18—21; but it is not apparently the plant of Fries, who does not quote Krombholz's figure in his 'Epicrisis,' though most of his figures are cited; and certainly not the plant of Bolton or Vittadini, which is the species described in the 'English Flora,' and which Fries I believe has in view, who refers to their figures in his 'Epicrisis.' It is most probable that Letellier's observations (*Ann. des Sc. Nat. n. s. vol. iii. p. 87.*) on *A. asper* apply to *A. Mariæ*, which is far better arranged in *Lepiota* than *Amanita*. Fries, indeed, who refers the species to *A. acute-squamosus*, Weinm., has done so, and quotes *A. asper* of Ficinus as a synonym.

140. *A. gambosus*, Fr. Syst. Myc. 1. p. 50. Common in exposed pastures in May and June. *A. graveolens*, Sow., which has been long doubtful, is certainly a synonym of the species before me, as appears from the original drawing, dated May 10, which gives the colouring very correctly. In the plate, unfortunately, one uniform ochraceous tint is given, which ought to have been confined to the centre of the pileus. This, or some nearly allied species, is the St. George's *Agaric* of Clusius, Hist. p. 264. Dr. Johnston's *A. graveolens* is probably some species of the same group.

141. *A. griseus*, Fr. Syst. Myc. 1. p. 158. Sherwood Forest. King's Cliffe.

142. *A. integrellus*, Fr. Syst. Myc. 1. p. 161. King's Cliffe.

143. *A. Belliæ*, Johnst. MSS. Pileo sicco, membranaceo, cupulæformi, ligneo-pallido, lamellis crassis unà cum interstitiis venosis, decurrentibus, pallidioribus; stipite tenui, fistuloso, cartilagineo, suprâ pallido, deorsum brunneo, basi floccosâ adhærente. On dead stems of the common reed. Gathered by Lord Home, October 6, 1837, at the Hirsell, Berwickshire. Pileus membranaceous, inverted, deeply cyathiform, half an inch broad, smooth, waved and furrowed at the edges, of a wood-brown hue, becoming paler when dry. Gills adnato-decurrent, at least in the inverted pileus, one line broad, rather distant, thick, more or less undulated, wrinkled on the sides and in the interstices with flexuous veins, once or twice divided near the edge, of a dull chalky white. Spores oblong, colourless, pellucid. Stem $1\frac{1}{2}$ inch high, about 1 line thick, fistular throughout, erect, stiff and elastic, smooth, white or very pale wood-brown above, towards the base of a dirty dark brown, becoming paler when dry, when it appears covered with a white mealiness. It is composed of two distinct strata, as will be seen by the figure. Root slightly incrassated, bent and fixed to the matrix by a dense cottony web.

A very remarkable and graceful species. The inversion of the pileus commences at a very early period, and together with the vein-like gills, gives it somewhat the appearance of a *Stylobates*, in which genus the pileus is completely obliterated. Its place in the system is near that of *A. tricolor*, A. & S., *A. stellatus*, Sow., &c., but its immediate affinities are not evident. It has analogies with several *Collybie* and the cognate species of *Marasmius*, as *M. erythropus*, Fr. The gills are very peculiar.

The above account is in great measure compiled from some notes kindly transmitted to me, together with a figure, by Dr. Johnston, who has named the species "in grateful remembrance of the assistance he has received from the Misses Bell

of Coldstream in his attempt to ascertain the Fungi of Berwickshire.”

TAB. X. fig. 1. *A. Belliæ*; 2, vertical section; 3, transverse section of the stem magnified; 4, spores highly magnified.

*144. *A. pyxidatus*, Bull. Abundant on the lawn before the Earl of Westmoreland's house at Apethorpe. It is to be observed that the specimens published in the First* Fasciculus of dried Fungi under this name, are *A. umbelliferus*, L., a very different and common species, of which several forms are described in Eng. Fl. I do not know by what accident the name was substituted.

145. *A. lampropus*, Fr. Syst. Myc. 1. p. 203. Common in pastures.

146. *A. serrulatus*, Fr. Syst. Myc. 1. p. 204. Ross-shire. Mr. Churchill Babington. Remarkable for its black-margined serrated gills.

147. *A. echinatus*, Roth. Cat. 2. t. 9. f. 1. *A. fumoso-purpureus*, Lasch in Linnæa. My *A. hæmatophyllus* is undoubtedly this species, as also *A. oxyosmus*, Mont. in Ann. d. Sc. Nat. The spores are sometimes abortive and colourless, which circumstance led me to place it in *Lepiota*. Fries in his 'Epicrisis' says, "Sporidia ex Lasch brunnescenti-spadicea, sed è fundo variant; in albo fusco-virent! in nigro argillaceo-albicans, hinc Amic. Berkeley per litt. nuperius retulit se legisse similem *Leucosporum*, i. e. analogiam offeret cum duplici *A. cepastipite*." My plants, though differing from the cause above-mentioned as to the colour of the spores, were evidently of the same species.

148. *A. cretaceus*, Fr. Syst. Myc. 1. p. 280. non *Bulliardi*. A single specimen was found in the present summer by Mr. J. Henderson in a hot-house at Milton. Distinguished from *A. campestris* by its gills, which remain for a long time white, and are at length rose-coloured. By which circumstance, again, it is distinguished from *A. excoriatus*, which it somewhat resembles.

149. *A. ericæus*, Pers., Fr. Syst. Myc. 1. p. 291. Common in exposed pastures after rain. Summer and autumn.

150. *A. sterquilinus*, Fr. Syst. Myc. 1. p. 308. King's Cliffe. Gills entirely destitute of utricles.

151. *Merulius pallens*, n. s. Totus effusus, tenuis, non separabilis, pallido-rubidus, carnosus-subgelatinosus, plicis poriformibus, margine indeterminato. On fallen decayed branches.

* I am happy to be able to state that the second edition of the First Fasciculus appeared on the 1st of November. The only species I have not been able to procure again is *Stilbum piliforme*.

Sherwood Forest, Notts. Grace Dieu Wood, Leic. Found by myself and Mr. C. Babington.

Forming large entirely resupinate effused patches several inches long and broad. Distinguished from every state of *M. tremellosus* by the total absence of a pileus, its thinness and its minute pores.

*152. *Thelephora tabacina*, Fr. Syst. Myc. 1. p. 437. (non Sowerbei.) Abundant in Grace Dieu Wood upon dead hazel stems. *Auricularia tabacina*, Sow., as I have ascertained from an inspection of the very specimens figured, is *Thelephora spadicea*, Fr. I have seen an authentic specimen of Persoon's *T. tabacina*, Myc. Eur. p. 118, in M. Desmazières's Herbarium, which is undoubtedly *T. spadicea*, Fr., with the following note in the handwriting of Persoon attached to it: "On confonde-roit volontiers cette espèce avec le *T. hirsuta* en ayant le même port, mais la couleur est constamment ferrugineuse, et la villosité déprimée." I cannot find any separate notice of *T. spadicea* either in the 'Synopsis' or 'Myc. Eur.'

*153. *T. lactescens*, Berk. Eng. Fl. vol. v. part 2. p. 169. This appears from an authentic specimen in M. Desmazières's Herbarium to be *T. salicina*, Pers. Myc. Eur. 1. p. 132, a species referred by Fries in his 'Index Alphabeticus' doubtfully to *T. mollis*. It should seem, however, to be very different. The species is common, and occurs on various kinds of wood.

154. *Clavaria flaccida*, Fr. Syst. Myc. 1. p. 471. Klotzsch exs. n. 122. King's Cliffe.

155. *C. rufa*, Fl. Dan. t. 775. f. 1. Abundant at Tansor, Norths., in a grass field. My specimens accord exactly with what is figured in Fl. Dan., except that the tint is not so deep. It appears a very distinct species.

156. *Peziza* (Al. Helv. Pust.) *succosa*, n. s. Media, integra, sessilis, hemisphærica, pallidè cereo-brunnea, extus pallidior, margine inflexo; carne flavo-succosâ. On the naked ground in woods, generally dispersed, but seldom abundant. Cup one inch in diameter, hemispherical or subglobose, with the margin incurved; within of a pale waxy brown, without paler and mealy. The flesh when broken pours out a yellow juice. Asci elongated, slightly flexuous, containing eight elliptic sporidia, each of which contains two sporidiola. Paraphyses linear.

TAB. X. fig. 5. *P. succosa*, nat. size; 6, vertical section; 7, asci and paraphysis; 8, sporidium.

*157. *P. furfuracea*, Roth, Cat. Bot. 2. p. 257. A small variety only of this is mentioned in Eng. Fl. Mr. C. Babington finds the state figured by Roth very abundant on twigs of alder at Thringstone, Leic.

158. *P. Ciborioides*, Fr. Syst. Myc. 2. p. 117. On oak leaves, King's Cliffe, and at Speke, Lancashire. My plant is exactly that of Montagne in Ann. des Sc. Nat., from whom I have specimens.

159. *P. versiformis*, Pers. Ic. et Descr. 1. p. 25. On old stumps of ash for two successive years at Apethorpe, Norths., in company with *Sphæria Bombarda* and *Bulgaria sarcoides*. A very fine and distinct species, nearly allied to *Patellaria*. Montagne informs me that *Patellaria pulla*, Fr., is the same plant. The sporidia are elongated and obtuse at either end.

160. *P. Ledi*, A. & S. t. 10. f. 7. On *Arbutus Uva Ursi*. Found by Mr. Churchill Babington in Glen Coe, Sept. 1838.

161. *Cenangium ferruginosum*, Fr. Syst. Myc. vol. ii. p. 187. Found abundantly at Milton, Norths., on branches of fir, *P. Pinaster* var. *maritima*, which have been accidentally broken off, but never on decayed branches.

162. *Stictis Phacidoides*, Fr. Syst. Myc. 2. p. 198. Found by Mr. Churchill Babington on dead leaves of *Arbutus Uva Ursi*, Lubcroy, Sutherlandshire.

166. *S. Lichenicola*, Mont. Ann. des Sc. Nat. n. s. vol. v. p. 281. t. 13. f. 3. This very curious production occurred abundantly at Wareham in 1832, and Mr. C. Babington has found it in the Isle of Skye. I am not at all sure that it is a true Fungus. Its sporidia, as Montagne remarks, and my own observations confirm the fact, are exactly like those of *Urceolaria scruposa*.

167. *S. nivea*, Pers. Myc. Eur. 2. p. 337. Desm. n. 763. On *Pinus Pinaster*, var. *maritima*, Milton, Norths.

168. *Sclerotium cepivorum*, n. s. Densè gregarium, l. conglomeratum, minutum, globosum, nigrum, è subiculo albo mucedineo emergens. Very common on onions at the point from which the roots spring, and often very destructive. Commencing with a white mucedinous patch about the fibres which decay, and in consequence the onion becomes loose, and is said to be mildewed. In this subiculum arise minute globose black bodies, either simply gregarious or conglomerated, which become at length in a greater or less degree free. Far smaller than *Sclerotium semen*, from which it differs in its mode of development, and several other points. Young specimens, when dry, are much collapsed, but more advanced individuals are slightly rugose.

163. *Sclerotium roseum*, Kneiff. in Moug. and Nest. n. 884. Found by Mr. Churchill Babington at Thringstone, Leic., with *Leptostroma junceum*, in the pith of *Juncus conglomeratus*.

164. *Acrospermum graminum*, Libert., Cord. Ic. part 3. fig.

73. King's Cliffe. Found by Mr. Churchill Babington and myself, July 1840. Corda has admirably illustrated the genus *Acrospermum*, and shown its affinity to *Sphæronema*. His analysis exactly accords with one sent by myself to Fries in 1837. The contents of the perithecia, which consist of very long linear bodies, are at length discharged at the apex. The structure is not at all that of *Sclerotium*. Dr. Greville's figure is correct enough as far as it goes, but he has not used glasses of sufficient power to show the structure accurately.

*165. *Coryne turbinata*, Schum., Corda Ic. Fasc. 2. t. 14. My *Tubercularia albida*, Eng. Fl. vol. v. part 2. p. 354, appears to be this species, with the figure of which it accords. At any rate I committed an error in referring the plant to the genus *Tubercularia*.

169. *Sphæria argillacea*, Fr., Obs. 1. t. 2. f. 5. On fallen ash branches. King's Cliffe, Norths., Speke, Lanc. There can be no doubt that the plant originally intended by Persoon in his 'Icones' is the present species. The perithecia are immersed and almost free on the same stick, and even in the same specimen.

170. *S. lutea*, A. & S. t. 1. f. 1. On very decayed branches. Clifton, Notts. A most interesting addition to the British Flora. At present I have found only a few specimens.

171. *S. scabrosa*, Dec., Fr. Syst. Myc. 2. p. 360. On the trunk of a maple. Morehay Lawn in Rockingham Forest.

172. *S. quercina*, Pers., Fr. Syst. Myc. 2. p. 362. King's Cliffe. This species, for which various plants, especially *S. leiphæmia*, are substituted in collections, has occurred once only.

173. *S. dissepta*, Fr. Syst. Myc. p. 392. On willow and ash. King's Cliffe and at Coleorton, by Mr. Churchill Babington.

174. *S. cucurbitula*, Tode. Fr. Syst. Myc. 2. p. 415. On small dead shoots of ash. King's Cliffe.

175. *S. pulicaris*, Fr. Syst. Myc. 2. p. 417. Common on dead branches of fig, elder, &c.; also on decayed cabbage stalks.

176. *S. scoriadea*, Fr., El. 2. p. 87. On birch twigs, Rose Hall, Sutherlandshire. Mr. Churchill Babington. I believe this production to be a *Verrucaria*. The contents of the perithecia are grumous, containing biseriate fusiform sporidia. I have seen only a single British specimen, and the fructification was not quite perfect enough to authorize me in removing the species at once to *Verrucaria*.

177. *S. conferta*, Fr. Syst. Myc. vol. ii. p. 435. On the leaves of *Vaccinium uliginosum*, Glen Coe. Mr. Churchill Ba-

bington, who proposes to substitute for the specific name "conferta" that of "mesiota," as there is another species in the 'Systema Mycologicum' previously published by Schweinitz with the same name.

178. *S. (Confertæ) Rhytismoides*, Bab. in Abstr. Linn. Trans. p. 32. Peritheciis tenuissimis globosis, sparsis l. confertis, epidermide nigrefactâ politâ tectis; gelatinâ salmoneo-rubrâ farctis, ostiolo minimo obsolete. On leaves of *Dryas octopetala*, Inchnadamff, Assint, Sutherlandshire. Mr. Churchill Babington, Sept. 1838.

Epiphyllous, occupying the whole surface or detached portions of the leaf. Perithecia generally scattered, sometimes confluent; in the former case the epidermis between them is cinereous, but that part immediately lying above them, where it is raised into a little hemispherical dot, jet-black and shining, from a thin carbonaceous layer situated immediately beneath the cuticle. Perithecia extremely thin, transparent, membranous, dotted with raised salmon-coloured areolæ; ostiolum simple, very minute. Contents of perithecia salmon-coloured, containing clavate asci with linear paraphyses. Sporidia biserial, oblong, obtuse, sometimes containing two sporidiola. The species does not appear to be very nearly allied to any hitherto described; its most obvious affinities, however, are with *Confertæ*.

Tab. X. fig. 9. Plant nat. size on *Dryas octopetala*; 10, vertical section; 11, portion of the delicate perithecium; 12, ditto more highly magnified; 13, 14, asci and paraphyses; 15, sporidia.

*179. *S. ceuthosporoides*, Berk. in Eng. Fl. vol. v. part 2. p. 258. Mr. C. Babington finds this little-known species at Coleorton, Leic.

*180. *S. aquila*, Fr. Syst. Myc. vol. ii. p. 442. In consequence of the inspection of some incorrectly named specimens, I have been led into error about the plant named *S. byssiseda*, Fr., in the English Flora, which is undoubtedly *S. aquila*, Fr. (*S. byssiseda*, Kz.), and that named *S. aquila*, Fr. is *S. thelena*. *S. aquila* is not very uncommon at the bottom of stakes, and sometimes occurs on sticks and trunks of trees. *S. thelena* is far more uncommon, and has hitherto been found only by Capt. Carmichael.

*181. *S. tristis*, Todë. Fr. Syst. Myc. vol. ii. p. 444. Since the publication of Eng. Fl. I have met with the collapsed form of this species.

182. *S. fulva*, Fr. El. 2. p. 90. On box leaves, Milton, Norths., Mr. J. Henderson. Two forms occur, one of a dull straw colour, the other of a brick red.

183. *S. mastoidea*, Fr. Syst. Myc. vol. ii. p. 463. On dead twigs of ash still remaining on the tree. King's Cliffe, Norths.

184. *S. vilis*, Fr. Syst. Myc. vol. ii. p. 466. On rotten oak wood, Morehay Lawn, Norths.

185. *S. lanata*, Fr. Syst. Myc. vol. ii. p. 482. *S. ossea*, Carm. MSS. Appin, Capt. Carmichael.

186. *S. epidermidis*, Fr. ! Scler. Suec. n. 19. A common species on the epidermis of *Lonicera*, *Sambucus*, &c. It is, however, a matter of doubt whether it be not more properly a *Verucaria*.

187. *S. epimyces*, Fr. Syst. Myc. vol. ii. p. 499. On decayed *Thelephora comedens*. Milton.

188. *S. arbuticola*, Fr. Syst. Myc. vol. ii. p. 500. Common in Scotland on *Arbutus Uva Ursi*. Mr. Churchill Babington.

189. *S. acuminata*, Sow., Fr. Syst. Myc. vol. ii. p. 506. Common on thistles. This is a very distinct species. *Sp. acuta*, Hoffm. has no asci, but the contents of the perithecia consist of very minute subelliptic corpuscles. The plant figured by Dr. Greville is not *S. acuta*, but *S. coniformis*, Fr. At least the analysis belongs to that species, as M. Desmazières has very justly observed. *S. acuminata* has extremely long sporidia, not septate as in *S. coniformis*.

190. *S. coniformis*, Fr. Syst. Myc. vol. ii. p. 508. Common in company with *S. acuta*.

191. *S. cruciferarum*, Fr. Syst. Myc. vol. ii. p. 525. Desm. ! exs. 985. Common on *Erysimum officinale*.

192. *S. (Depazea) stemmatea*, Fr. Syst. Myc. vol. ii. p. 528. On *Vaccinium Vitis Idæa*. Scotland. Mr. Churchill Babington.

S. (Depazea) Ribicola, Fr. l. c. Very common on currant leaves. Spores discharged in a little irregular mass, strongly curved, larger than those which are common to the genus *Cytispora*, obtuse at either end, containing a few nuclei.

TAB. XI. fig. 1. Spores highly magnified.

193. *S. (Depazea) pallor*, n. s. Maculis pallidis, subrotundis; peritheciis sparsis, immersis, pallidis, epidermide supra ostiolum obsoletum prominulo; sporis linearibus curvulis. On living bramble shoots. May, 1838. King's Cliffe, Woodnewton, Norths. This remarkable species forms subrotund, sometimes confluent pale spots, sprinkled with little elevated dark-bordered dots, which indicate the situation of the perithecia. Perithecia extremely delicate, of a pale fawn-colour, filled with linear slightly curved spores, much larger than those in the genus *Cytispora*, some of which contain an obscure row of nuclei.

TAB. XI. fig. 2. *a, b*. Spores more or less magnified.

194. *S. (Depazea) concava*, n. s. Maculis subrotundis, excavatis, cervinis, margine fusco; peritheciis subcentralibus, tenerrimis, fuscellis, ostiolo brevissimo, ore rotundo; gelatinâ subcirrhosâ; sporis oblongis, uniseptatis, medio contractis. On pods of the garden pea, and occasionally on the leaves and petals. King's Cliffe. It was also pointed out to me by Captain Carmichael at Appin in 1824.

Very destructive in damp seasons to peas, in the pods of which it forms little round fawn-coloured pits studded in the centre with the short subcirrhiform masses of the spores. The plant is just the same on the leaves, except that in consequence of their less succulent nature the depression is not so evident. On the petals there are no spots, but merely scattered perithecia, especially upon the veins. Perithecia very delicate, but certainly present. Spores oblong, contracted in the middle, uniseptate, with occasionally a single nucleus in each cell. Other forms, arising from the total or partial suppression or elongation of one of the cells, will be seen in the figure.

TAB. XI. fig. 3. *a*, perithecium from petal; *b*, spores. Both highly magnified.

195. *S. (Depazea) Convolvulicola*, Dec., Fl. Fr. 6. p. 148. On *Convolvulus arvensis*. King's Cliffe. This species has been communicated to correspondents under the name of *S. fuscella*, n. s.

*196. *Sphæronema blepharistoma*, Berk. in Mag. of Zool. and Bot. vol. i. p. 512. *Sphæronema vitreum*, Corda, Ic. Fasc. 1. f. 297.

There is no doubt that my plant and that of Corda are the same, though their habitats are so very different. I find it, however, not only on decayed *Ag. adustus*, but also on nettle roots. I do not know which name has the priority, mine or Corda's. But as the preface of M. Corda's Fasciculus is dated Aug. 1836, although not published till 1837, in which year also my paper appeared, it will be better at once to adopt Corda's name, especially as it is very descriptive.

197. *Phoma concentricum*, Desm. ! ined. *Depazea Agaves*, Mont. Ann. des Sc. Nat. n. s. 1. p. 344. Common on leaves of *Yucca*. This plant has been communicated to correspondents under the name of *P. circinans*. I have, however, specimens from M. Desmazières under the name adopted above, and under which it is possibly already published*. It is a true

* Ann. des Sc. Nat. n. s. t. xiii. p. 189.

Phoma. *P. salignum* and *P. pustula*, it is to be observed, are species of *Sphaeria*, possessing perfect asci.

198. *Dothidea Sphaerioides*, Fr. Syst. Myc. 2. p. 552. On dead twigs of ash. Common.

199. *D. pyrenophora*, Fr. l. c. On fallen apple and pear trees. King's Cliffe, Apethorpe. These two species belong to Fries's genus *Dothiora*, which is, I believe, at present not characterized.

200. *D. Chaetomium*, Kz., Fr. Syst. Myc. 2. p. 563. On leaves of different species of *Rubus*, but especially *R. Idæus* and *R. cæsius*. Grace Dieu, Leic. Mr. Churchill Babington. Rockingham Forest.

*201. *Asteroma Padi*, Grev.! Fr. El. 2. p. 151. Arisaig. Mr. Churchill Babington. Spores at length oozing out, linear, very minute, slightly curved. I cannot account for the difference between my figure of the spores and that of Madame Libert in the Transactions of the Linnæan Society of Paris, where they are drawn as clavate, with a septum.

TAB. XI. fig. 4. Spores of *A. Padi* highly magnified.

202. *A. Rosæ*, Lib., *Erysiphe radiosa*, Fr.! Scler. Suec. On rose leaves. Autumn. Very common during the present and past autumn.

Fries remarks, that no one has hitherto seen the perithecia perfect. Madame Libert, however, figures spores in the Transactions of Linn. Soc. of Paris for 1826. My observations, however, do not accord with Madame Libert's, who probably used a compound microscope of the old construction. They are of a very curious form, consisting of two obovate cells attached by their broader ends, and each containing two nuclei.

TAB. XI. fig. 5. Spores of *A. Rosæ* highly magnified.

203. *A. labes*, n. s. Maculis indefinitis, fuscis, non fibrillosis; gelatinâ subcirrhosâ; sporis subpyriformibus, obsolete uniseptatis. On poplar leaves. Rushton, Norths., July 1840. Forming irregular brown patches, scattered, or occupying almost the whole of the upper side of the leaf. There are no distinct fibres, but the stroma when held up to the light and examined carefully, is found to be disposed in a fibrillose form, so as to resemble the seaweed-like spots in mocha stones. Spores forming short tendrils, subpyriform, with an obscure septum (not always however visible) at the contracted part of the spore. The spores in the fresh plant showed little granules, generally disposed in two patches, but when dry I find two

large nuclei in the upper cell, and sometimes one in the lower cell*.

TAB. XI. fig. 6. *a*, spores from fresh plants; *b*, ditto from dry plants. Both highly magnified.

204. *A. Brassicæ*, Chev., Fl. Par. 1. p. 449. On decayed cabbage leaves. Common. This has quite the habit of a *Depazea*. There are no fibres, but they do not seem to constitute by themselves the essential character of the genus. *Dothidea Alchemillæ* has fibres sometimes, though the contrary is stated in the 'English Flora,' and it is then externally an *Asteroma*, but it has true asci; and the perithecia, as in *Dothidea Chætomium*, are beset with short bristles, which are however to be seen only on very close examination.

205. *Leptostroma vulgare*, Fr. Syst. Myc. vol. ii. p. 599. On dead stems of *Artemisia*. Berwick. Dr. Johnston.

206. *Diplodia Ilicicola*, Desm.! exs. n. 988. On small branches of holly. Milton, Norths. The true distinction between this genus and that of *Sphæria* is, that the fructifying bodies are not asci containing sporidia, but spores produced on sporophores, exactly as in the analogous genus *Melanconium*, which differs principally in having no perithecium.

TAB. XI. fig. 7. *a*, young spores; *b*, perfect spores on their sporophores. Both highly magnified.

207. *D. Viticola*, Desm.! exs. n. 989. On vine branches. King's Cliffe. I have also found a *Diplodia* on branches of raspberry. *Stilbospora biloculata*, Johnst.! belongs to this genus. The species at present have not been sufficiently studied, and it will probably be found that many are forms of *Sphæria mutila*. In an early stage of growth the perithecia are filled with a delicate white cellular tissue, when they resemble small *Sclerotia*. This gradually vanishes in the centre, and the portion towards the circumference becomes fertile. This is also the case with certain species of *Sphæria*, which will hereafter probably constitute a new genus. Amongst them is the curious *S. phæocomes*, which I have found in fructification, and of which I have given a figure. Tab. XI. fig. 8.

* I have used the term nuclei to include oil drops or real granules, as it is not always certain what is the nature of the bodies commonly called sporidiola. They certainly have some important influence on the vegetation, like the cytoblasts of higher plants. I have seen a sporidium of *Sphæria bififormis* germinating while yet in the perithecium, and opposite to every nucleus a distinct filament was given off. See Tab. XI. fig. 8. *b*.

[To be continued.]